WHAT IS CLAIMED IS:

1. An image processing apparatus comprising:

input means for inputting an image of one of a plurality of image types;

selecting means for selecting a recording mode from among a first recording mode for recording the image on a recording material at a predetermined recording density, and a second recording mode for recording the image on the recording material at a recording density lower than that of the first recording mode;

determining means for determining if the input image is a predetermined image type; and

control means for changing to the first recording mode, when the second recording mode is selected by said selecting means and said determining means determines that the input image is the predetermined image type.

2. An image processing apparatus according to Claim 1, further comprising a recording means for recording the image in one of the first recording mode and the second recording mode.

3. An image processing apparatus according to Claim 1, wherein said input means inputs one-pixel binary image data.

4. An image processing apparatus according to Claim 1, wherein the second recording mode is for decimating and recording the input image.

5. An image processing apparatus according to Claim 3, wherein said input means inputs one of binary data received from another communication apparatus and binary data obtained by binarizing multi-valued image data obtained by reading a subject copy.

6. An image processing apparatus according to Claim 1, wherein the predetermined image type is a color image, and said determining means determines whether the input image is one of a monochrome image and a color image; and

said control means changes to the first recording mode, when the second recording mode is selected by said selecting means, and said determining means determines that the input image is a color image.

7. An image processing apparatus according to Claim 1, wherein when the input image type is a monochrome image, and said determining means determines whether the monochrome image is one of a character image and a halftone image; and

said control means changes to the first recording mode,

when the second recording mode is selected by said selecting
means, and said determining means determines that the
monochrome image is a halftone image.

8. An image processing apparatus according to Claim 1,
wherein said input means inputs an image having a plurality
of pages;

said determining means determines the image type of the
input image in units of a page; and

said control means controls the recording mode in units
of a page.

9. An image processing apparatus comprising:

input means for inputting an image of one of a
plurality of image types;

selecting means for selecting a recording mode from
among a first recording mode for unconditionally decimating
the image input by said input means and recording the image
on a recording material, a second recording mode for
referring to images of pixels surrounding the image input by
said input means, decimating the image, and recording the
image on the recording material, and a third recording mode
for recording the image input by said input means on the
recording material without decimating the image;

determining means for determining if the input image is

a predetermined image type; and

control means for changing to the third recording mode, when one of the first and second recording modes is selected by said selecting means, and said determining means determines that the input image is the predetermined image type.

10. An image processing apparatus according to Claim 9, further comprising a recording means for recording the image in one of the first, second, and third recording modes.

11. An image processing apparatus according to Claim 9, wherein said input means inputs one-pixel binary image data.

12. An image processing apparatus according to Claim 11, wherein said input means inputs one of binary data received from another communication apparatus and binary data obtained by binarizing multi-valued image data obtained by reading a subject copy.

13. An image processing apparatus according to Claim 9, wherein the predetermined image type is a color image, and said determining means determines whether the input image is one of a monochrome image and a color image; and

said control means changes to the third recording mode,

when one of the first and second recording modes is selected
by said selecting means, and said determining means
determines that the input image is a color image.

14.   An image processing apparatus according to Claim 9,
wherein said input means inputs an image having a plurality
of pages;

said determining means determines the image type of the
input image in units of a page; and

said control means controls the recording mode in units
of a page.

15.   An image processing apparatus comprising:

input means for inputting an image of one of a
plurality of image types;

selecting means for selecting a recording mode from
among a first recording mode for unconditionally decimating
the image input by said input means and recording the image
on a recording material, a second recording mode for
referring to images of pixels surrounding the image input by
said input means, decimating the image, and recording the
image on the recording material, and a third recording mode
for recording the image input by said input means on the
recording material without decimating the image;

determining means for determining the image type of the

input image; and

control means for changing the recording mode selected by said selecting means in accordance with a determination result by said determining means;

wherein said determining means determines whether the input image is one of a monochrome image and a color image, and if a monochrome image, whether the monochrome image is one of a character image and a halftone image; and

said control means changes to the second recording mode, when the first recording mode is selected by said selecting means, and said determining means determines that the monochrome image is a halftone image.

16. An image processing method comprising:

an inputting step of inputting an image of one of a plurality of image types;

a selecting step of selecting a recording mode from among a first recording mode for recording the image on a recording material at a predetermined recording density, and a second recording mode for recording the image on the recording material at a recording density lower than that of the first recording mode;

a determining step of determining if the input image is a predetermined image type; and

a controlling step of changing to the first recording

mode, when the second recording mode is selected by said selecting step, and said determining step determines that the input image is the predetermined image type.

17.   An image processing method according to Claim 16, further comprising a recording step of recording the image in one of the first and second recording modes.

18.   An image processing method according to Claim 16, wherein said inputting step inputs one-pixel binary image data.

19.   An image processing method according to Claim 16, wherein the second recording mode is for decimating and recording the input image.

20.   An image processing method according to Claim 18, wherein said inputting step inputs one of binary data received from another communication apparatus and binary data obtained by binarizing multi-valued image data obtained by reading a subject copy.

21.   An image processing method according to Claim 16, wherein the predetermined image type is a color image, and said determining step determines whether the input image is

one of a monochrome image and a color image; and

said controlling step changes to the first recording mode, when the second recording mode is selected by said selecting step, and said determining step determines that the input image type is a color image.

22. An image processing method according to Claim 16, wherein the input image type is a monochrome image, and said determining step determines whether the monochrome image is one of a character image and a halftone image; and

said controlling step changes to the first recording mode, when the second recording mode is selected by said selecting step, and said determining step determines that the monochrome image is a halftone image.

23. An image processing method according to Claim 16, wherein said inputting step inputs an image having a plurality of pages;

said determining step determines the image type of the input image in units of a page; and

said controlling step controls the recording mode in units of a page.

24. An image processing method comprising:

an inputting step of inputting an image of one of a

plurality of image types;

a selecting step of selecting a recording mode from among a first recording mode for unconditionally decimating the image input by said inputting step and recording the image on a recording material, a second recording mode for referring to images of pixels surrounding the image input by said inputting step, decimating the image, and recording the image on the recording material, and a third recording mode for recording the image input by said inputting step without decimating the image;

a determining step of determining if the image is a predetermined image type; and

a controlling step of changing to the third recording mode, when one of the first and second recording modes is selected by said selecting step, and said determining step determines that the input image is the predetermined image type.

25. An image processing method according to Claim 24, further comprising a recording step of recording the image in one of the first, second, and third recording modes.

26. An image processing method according to Claim 24, wherein said inputting step inputs one-pixel binary image data.

27. An image processing method according to Claim 26, wherein said inputting step inputs one of binary data received from another communication apparatus and binary data obtained by binarizing multi-valued image data obtained by reading a subject copy.

28. An image processing method according to Claim 24, wherein the predetermined image type is a color image, and said determining step determines whether the input image is one of a monochrome image and a color image; and

said controlling step changes to the third recording mode, when one of the first and second recording modes is selected by said selecting step, and said determining step determines that the input image is a color image.

29. An image processing method according to Claim 24, wherein said inputting step inputs an image having a plurality of pages;

said determining step determines the image type of the input image in units of a page; and

said controlling step controls the recording mode in units of a page.

30. An image processing method comprising:

an inputting step of inputting an image of one of a plurality of image types;

a selecting step of selecting a recording mode from among a first recording mode for unconditionally decimating the image input by said inputting step and recording the image on a recording material, a second recording mode for referring to images of pixels surrounding the image input by said inputting step, decimating the image, and recording the image on the recording material, and a third recording mode for recording the image input by said inputting step on the recording material without decimating the image;

a determining step of determining the image type of the input image; and

a controlling step of changing the recording mode selected by said selecting step in accordance with a determination result by said determining step;

wherein said determining step determines whether the input image is one of a monochrome image and a color image, and if a monochrome image, whether the monochrome image is one of a character image and a halftone image; and

said controlling step changes to the second recording mode when the first recording mode is selected by said selecting step, and said determining step determines that the monochrome image is a halftone image.

31. A computer readable medium having recorded thereon codes for implementing a computer implementable image processing method comprising:

an inputting step of inputting an image of one of a plurality of image types;

a selecting step of selecting a recording mode from among a first recording mode for recording the image on a recording material at a predetermined recording density, and a second recording mode for recording the image on the recording material at a recording density lower than that of the first recording mode;

a determining step of determining if the input image is a predetermined image type; and

a controlling step of changing to the first recording mode, when the second recording mode is selected by said selecting step, and said determining step determines that the input image is the predetermined image type.

32. A computer readable medium according to Claim 31, further comprising a recording step of recording the image in one of the first and second modes.

33. A computer readable medium according to Claim 31, wherein said inputting step inputs one-pixel binary image data.

34. A computer readable medium according to Claim 31, wherein the second recording mode is for decimating and recording the input image.

35. A computer readable medium according to Claim 33, wherein said inputting step inputs one of binary data received from another communication apparatus and binary data obtained by binarizing multi-valued image data obtained by reading a subject copy.

36. A computer readable medium according to Claim 31, wherein the predetermined image type is a color image, and said determining step determines whether the input image is one of a monochrome image and a color image; and

said controlling step changes to the first recording mode, when the second recording mode is selected by said selecting step, and said determining step determines that the input image type is a color image.

37. A computer readable medium according to Claim 31, wherein the input image type is a monochrome image, and said determining step determines whether the monochrome image is one of a character image and a halftone image; and

said controlling step changes to the first recording

mode, when the second recording mode is selected by said

selecting step, and said determining step determines that

the monochrome image is a halftone image.

38. A computer readable medium according to Claim 31,

wherein said inputting step inputs an image having a

plurality of pages;

said determining step determines the image type of the

input image in units of a page; and

said controlling step controls the recording mode in

units of a page.

39. A computer readable medium having recorded thereon

codes for implementing a computer implementable image

processing method comprising:

an inputting step of inputting an image of one of a

plurality of image types;

a selecting step of selecting a recording mode from

among a first recording mode for unconditionally decimating

the image input by said inputting step and recording the

image on a recording material, a second recording mode for

referring to images of pixels surrounding the image input by

said inputting step, decimating the image, and recording the

image on the recording material, and a third recording mode

for recording the image input by said inputting step without

decimating the image;

a determining step of determining if the image is a predetermined image type; and

a controlling step of changing to the third recording mode, when one of the first and second recording modes is selected by said selecting step, and said determining step determines that the input image is the predetermined image type.

40. A computer readable medium according to Claim 39, further comprising a recording step of recording the image in one of the first, second, and third recording modes.

41. A computer readable medium according to Claim 39, wherein said inputting step inputs one-pixel binary image data.

42. A computer readable medium according to Claim 39,, wherein said inputting step inputs one of binary data received from another communication apparatus and binary data obtained by binarizing multi-valued image data obtained by reading a subject copy.

43. A computer readable medium according to Claim 39, wherein the predetermined image type is a color image, and

said determining step determines whether the input image is one of a monochrome image and a color image; and

said controlling step changes to the third recording mode, when one of the first and second recording modes is selected by said selecting step, and said determining step determines that the input image is a color image.

44.   A computer readable medium according to Claim 39, wherein said inputting step inputs an image having a plurality of pages;

said determining step determines the image type of the input image in units of a page; and

said controlling step controls the recording mode in units of a page.

45.   A computer readable medium having recorded thereon codes for implementing a computer implementable image processing method comprising:

an inputting step of inputting an image of one of a plurality of image types;

a selecting step of selecting a recording mode from among a first recording mode for unconditionally decimating the image input by said inputting step and recording the image on a recording material, a second recording mode for referring to images of pixels surrounding the image input by

said inputting step, decimating the image, and recording the image on the recording material, and a third recording mode for recording the image input by said inputting step on the recording material without decimating the image;

a determining step of determining the image type of the input image; and

a controlling step of changing the recording mode selected by said selecting step in accordance with a determination result by said determining step;

wherein said determining step determines whether the input image is one of a monochrome image and a color image, and if a monochrome image, whether the monochrome image is one of a character image and a halftone image; and

said controlling step changes to the second recording mode, when the first recording mode is selected by said selecting step, and said determining step determines that the monochrome image is a halftone image.

46. An image processing apparatus comprising:

input means for inputting an image of one of a color image and a monochrome image;

selecting means for selecting a recording mode from among a normal recording mode for recording the image on a recording material at a predetermined recording density, and a decimation recording mode for recording the image on the

recording material at a recording density lower than that of
the normal recording mode;

determining means for determining if the input image is
a color image or a monochrome image; and

control means for changing to the normal recording mode,
when the decimation recording mode is selected by said
selecting means and said determining means determines that
the input image is a color image.

47. An image processing apparatus comprising:

input means for inputting an image of one of a color
image and a monochrome image;

selecting means for selecting a recording mode from
among a first recording mode for unconditionally decimating
the image input by said input means and recording the image
on a recording material, a second recording mode for
referring to images of pixels surrounding the image input by
said input means, decimating the image, and recording the
image on the recording material, and a third recording mode
for recording the image input by said input means on the
recording material without decimating the image;

determining means for determining if the input image is
a color image or a monochrome image; and

control means for changing to the third recording mode,
when one of the first and second recording modes is selected

by said selecting means, and said determining means
determines that the input image is a color image.

48. An image processing apparatus comprising:

input means for inputting an image of one of a color
image and a monochrome image;

selecting means for selecting a recording mode from
among a first recording mode for unconditionally decimating
the image input by said inputting step and recording the
image on a recording material, a second recording mode for
referring to images of pixels surrounding the image input by
said inputting step, decimating the image, and recording the
image on the recording material, and a third recording mode
for recording the image input by said inputting step on the
recording material without decimating the image;

determining means for determining whether the input
image is one of a monochrome image and a color image, and if
a monochrome image, whether the monochrome image is one of a
character image and a halftone image; and

control means for changing to the second recording mode,
when the first recording mode is selected by said selecting
means, and said determining step determines that the
monochrome image is a halftone image.

49. An image processing method comprising:

an inputting step of inputting an image of one of a color image and a monochrome image;

a selecting step of selecting a recording mode from among a normal recording mode for recording the image on a recording material at a predetermined recording density, and a decimation recording mode for recording the image on the recording material at a recording density lower than that of the normal recording mode;

a determining step of determining if the input image is a color image or a monochrome image; and

a controlling step of changing to the normal recording mode, when the decimation recording mode is selected by said selecting means and said determining means determines that the input image is a color image.

50. An image processing apparatus comprising:

an inputting step of inputting an image of one of a color image and a monochrome image;

a selecting step of selecting a recording mode from among a first recording mode for unconditionally decimating the image input by said input means and recording the image on a recording material, a second recording mode for referring to images of pixels surrounding the image input by said input means, decimating the image, and recording the image on the recording material, and a third recording mode

for recording the image input by said input means on the recording material without decimating the image;

a determining step of determining if the input image is a color image or a monochrome image; and

a controlling step of changing to the third recording mode, when one of the first and second recording modes is selected by said selecting means, and said determining means determines that the input image is a color image.

51. An image processing method comprising:

an inputting step of inputting an image of one of a color image and a monochrome image;

a selecting step of selecting a recording mode from among a first recording mode for unconditionally decimating the image input by said inputting step and recording the image on a recording material, a second recording mode for referring to images of pixels surrounding the image input by said inputting step, decimating the image, and recording the image on the recording material, and a third recording mode for recording the image input by said inputting step on the recording material without decimating the image;

a determining step of determining whether the input image is one of a monochrome image and a color image, and if a monochrome image, whether the monochrome image is one of a character image and a halftone image; and

a controlling step of changing to the second recording mode, when the first recording mode is selected by said selecting means, and said determining step determines that the monochrome image is a halftone image.

52. A computer readable medium having recorded thereon codes for implementing a computer implementable image processing method comprising:

an inputting step of inputting an image of one of a color image and a monochrome image;

a selecting step of selecting a recording mode from among a normal recording mode for recording the image on a recording material at a predetermined recording density, and a decimation recording mode for recording the image on the recording material at a recording density lower than that of the normal recording mode;

a determining step of determining if the input image is a color image or a monochrome image; and

a controlling step of changing to the normal recording mode, when the decimation recording mode is selected by said selecting means and said determining means determines that the input image is a color image.

53. A computer readable medium having recorded thereon codes for implementing a computer implementable image

processing method comprising:

an inputting step of inputting an image of one of a color image and a monochrome image;

a selecting step of selecting a recording mode from among a first recording mode for unconditionally decimating the image input by said input means and recording the image on a recording material, a second recording mode for referring to images of pixels surrounding the image input by said input means, decimating the image, and recording the image on the recording material, and a third recording mode for recording the image input by said input means on the recording material without decimating the image;

a determining step of determining if the input image is a color image or a monochrome image; and

a controlling step of changing to the third recording mode, when one of the first and second recording modes is selected by said selecting means, and said determining means determines that the input image is a color image.

54. A computer readable medium having recorded thereon codes for implementing a computer implementable image processing method comprising:

an inputting step of inputting an image of one of a color image and a monochrome image;

a selecting step of selecting a recording mode from

among a first recording mode for unconditionally decimating the image input by said inputting step and recording the image on a recording material, a second recording mode for referring to images of pixels surrounding the image input by said inputting step, decimating the image, and recording the image on the recording material, and a third recording mode for recording the image input by said inputting step on the recording material without decimating the image;

a determining step of determining whether the input image is one of a monochrome image and a color image, and if a monochrome image, whether the monochrome image is one of a character image and a halftone image; and

a controlling step of changing to the second recording mode, when the first recording mode is selected by said selecting means, and said determining step determines that the monochrome image is a halftone image.